

## RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/509,420  
Source: Pat 10  
Date Processed by STIC: 10/5/04

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

~~TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER~~  
~~VERSION 4.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND~~  
~~TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:~~

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

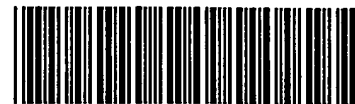
Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebs/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box-1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 06/05/04):  
U.S. Patent and Trademark Office, 220 20<sup>th</sup> Street S., Customer Window, Mail Stop Sequence, Crystal Plaza Two, Lobby, Room 1B03, Arlington, VA 22202

Revised 05/17/04

## Raw Sequence Listing Error Summary

<u>ERROR DETECTED</u>	<u>SUGGESTED CORRECTION</u>	SERIAL NUMBER: <u>10/509,420</u>
<b>ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE</b>		
1 <u>    </u> Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."	
2 <u>    </u> Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.	
3 <u>    </u> Misaligned Amino Numbering	The numbering under each 5 <sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.	
4 <u>  </u> Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.	
5 <u>    </u> Variable Length	Sequence(s) <u>    </u> contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.	
6 <u>    </u> PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) <u>    </u> . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.	
7 <u>    </u> Skipped Sequences (OLD RULES)	Sequence(s) <u>    </u> missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped  Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.	
8 <u>    </u> Skipped Sequences (NEW RULES)	Sequence(s) <u>    </u> missing. If intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000	
9 <u>    </u> Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.	
10 <u>    </u> Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence	
11 <u>    </u> Use of <220>	Sequence(s) <u>    </u> missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)	
12 <u>    </u> PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.	
13 <u>    </u> Misuse of n/Xaa	"n" can only represent a single <u>nucleotide</u> ; "Xaa" can only represent a single <u>amino acid</u>	



PCT

## RAW SEQUENCE LISTING

DATE: 10/05/2004

PATENT APPLICATION: US/10/509,420

TIME: 11:12:11

Input Set : A:\PTO.FG.txt

Output Set: N:\CRF4\10052004\J509420.raw

3 <110> APPLICANT: Japan as Represented by President of The University of Tsukuba  
 5 <120> TITLE OF INVENTION: A New Root-knot Nematodes Resistance Gene and Its Use  
 7 <130> FILE REFERENCE: PH-1611-PCT  
 C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/509,420  
 C--> 10 <141> CURRENT FILING DATE: 2004-09-24  
 12 <150> PRIOR APPLICATION NUMBER: JP 2002-89622  
 13 <151> PRIOR FILING DATE: 2002-03-27  
 15 <160> NUMBER OF SEQ ID NOS: 8  
 17 <170> SOFTWARE: PatentIn Ver. 2.1

*see item 4 on Enr  
 Summary Sheet*

**Does Not Comply  
 Corrected Diskette Needed**

## ERRORED SEQUENCES

19 <210> SEQ ID NO: 1  
 20 <211> LENGTH: 2613  
 21 <212> TYPE: DNA  
 22 <213> ORGANISM: Solanum tuberosum  
 24 <400> SEQUENCE: 1  
 25 atggccttatg ctgctattac ttgtcttatg agaaccatac aacaatctat tcaacttact 60  
 E--> 26 ggatgtaatt tgcaatcatt ctatgaaaag tttgaatctt tgagagcttn tttggagaaa 120  
 27 cacacgggca atcttgatgc attgaaaagc ttggaagctg aaatcataga acttgatgc 180  
 28 actacagaag atatttttga cttggaatca agaaatgtta aaaatccaat ttcaagaata 240  
 29 atagcttttt ggaaacttca ttctctcttg aaacaagcag taggacgcag tgattccacg 300  
 30 ctgaacaagt ggatggaaat gcagaacatg tacaccaaaa ggaaagatga agaagcacat 360  
 31 aacttgatc ttgctagtac tgcataatg tctcaacatg ttgtggagcc tcaggatatg 420  
 32 atggttggac atgaaaatga actcgagatg atcatgcagg atcagcttgc tagaggagca 480  
 33 agtgaacttg aagttgtctc cattgtaggt atggggggca tcggtaagac aactttggct 540  
 34 gacaaaattt ataatgatcc attcataatg tcacactttg acattcgtgc aaaagctact 600  
 35 gtttcacaag agtattgcgc gaaaaatgta tgcctaagtc ttctttcttc tataagtga 660  
 36 aagagcaatg agcatcaaga tgatgggcaa ctagctgac gactgcaaaa aagtctaaaa 720  
 37 gggaggaggt atttagtagt cattgatgac atatggaccg aacgagcttg ggatgatag 780  
 38 aaactatgtt tcccagattg taactgtgga agcagaatac tgctgacaac tcggaatatg 840  
 39 gaagtagcta agtatgctag ctcaggtaag cctcctaaga atcaaatgcg actcttgaat 900  
 40 attgatgaaa gttggaagtt actaccagc agagtctttg taaaaaactg tttctccct 960  
 41 gaatttgaac aacttgggaa acaaattgct cttaaattgcg ggggattacc tttagctatt 1020  
 42 atcgttattg ctggagttct gtctaattt ggtgagtcatt ttgatgaatg gacaagtgtt 1080  
 43 gcagagaatg taagttcagt ggtaagtaca gatcacaatg tacaatgcag gagagtgttg 1140  
 44 gcgttgagtt atcatcactt accacatcac ttgagagcgt gttttctata ttttgcaata 1200  
 45 ttcccggagg atacagtgat ttttgtgaat aaacttgtga aattatggac agcagagggt 1260  
 46 tttttgaaga cagaaatgat gaaaagtata gaagaagttg cagaaaaatg tgttaaagat 1320  
 47 cttatagata gaaatttagt ttttgtccaa agggtagta gttttgatgg aaaaataaaa 1380  
 E--> 48 gcttgtggaa tgcattgatg gatccgtgaa ctctgcttga gagaagctcg aaactcaaat 1440  
 49 tttgtgaatg ttataatgga taatcaaaat ccatgtgaac aatccatgaa ttattccaca 1500

*pp 1-4*

*see p. 3  
 for enr  
 explanation*

*see p. 2 for more enr*

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DATE: 10/05/2004

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Input Set : A:\PTO.FG.txt

Output Set: N:\CRF4\10052004\J509420.raw

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50 aagggagttc ggataagtat ccaatccaaa cttgctgcc aatcagttgtc tatggtttgt 1560
51 aataacgatt cctattctgt tctcgttttt actgaagatc cctcaagctc aagaatggtg 1620
52 cagggccttga agcattttcaa ggtactaaga gtacttatct tgcttcggtg gcattgcatg 1680
53 tttcccaatt gcatagttga actatttcac ttgagatata taggtttgag tgtttactcg 1740
54 tccactaatg attgggatat ttgttttcca tcctcaatag cttagccttga gtatttgcaa 1800
55 actttaatac ttaagttttc aacatctctc ggatggaagt tctactagact tttcagatta 1860
56 ccatcgagta ttttcaagat gtcgcaattg aggcactctat ctttggactg gaattacttg 1920
57 aatggacatg aatctagcga gagatcaagt tgggttttga gaaatcttga gtgtctgtct 1980
58 ggatggaatc ctttatcttg tacttcttcg gtttttagac tacttccgaa tgtaaagaag 2040
59 ttgcaaatat gtggtatcca agaagactac ataagaaagg acaaggtctt tgatgatctt 2100
60 tgctgcttaa atcagcttac agaattgaaa ttttaagatta gaaagatgat tggagagca 2160
61 atatatgata catcttttgt tcttctctct cttaggtgctt ttccgaagaa ccttaagaag 2220
62 ttagctttta caggtagctg tttgcattgg aaggatttgg agattcttgg taagttgcct 2280
63 aaabtcgagg cctccaaact aggatatgat gcctgcattg gtactgattg ggaagtaggt 2340
64 gaggaagggt ttccacactt gaagttcttg cgattgaagc atttgtactt gcataactgg 2400
65 agagctagta gtgatcattt tccacgactt gaacgactag tcattaaccg tcgttgagg 2460
E--> 66 atgtattcga tcccacagga tttttagac ataaccacac ttcagctgat tcatataann 2520
67 gactctgcaa aatctgttgg gaactccgcc aagaagattc agcaggaaat tgaagacagc 2580
68 tatggaagtt ctgttgaggt ctgtatcagt tag 2613
95 <210> SEQ ID NO: 4
96 <211> LENGTH: 17
97 <212> TYPE: DNA
98 <213> ORGANISM: Artificial Sequence
100 <220> FEATURE:
101 <223> OTHER INFORMATION: Description of Artificial Sequence:primer
103 <400> SEQUENCE: 4
E--> 104 gttttcccag tcacgac
143 <210> SEQ ID NO: 8
144 <211> LENGTH: 24
145 <212> TYPE: DNA
146 <213> ORGANISM: Artificial Sequence
148 <220> FEATURE:
149 <223> OTHER INFORMATION: Description of Artificial Sequence:primer
151 <400> SEQUENCE: 8
152 ctaactgata cagacctcaa caga 24
E--> 157 1/6

```

delete

18

17

VARIABLE LOCATION SUMMARY

DATE: 10/05/2004

PATENT APPLICATION: US/10/509,420

TIME: 11:12:12

Input Set : A:\PTO.FG.txt

Output Set: N:\CRF4\10052004\J509420.raw

*errn explanation*  
Use of n's or Xaa's (NEW RULES):

Use of n's and/or Xaa's have been detected in the Sequence Listing.

Use of <220> to <223> is MANDATORY if n's or Xaa's are present.

in <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

Seq#:1; N Pos. 110,1435,2519,2520

10/509,420

4

SEQUENCE LISTING

<110> Japan as Represented by President of The University of Tsukuba

<120> A New Root-knot Nematodes Resistance Gene and Its Use

<130> PH-1611-PCT

<150> <140> PCT/JP02/12392

<151> <141> 2002-11-27

*There are prior data, not current.*

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/509,420

DATE: 10/05/2004

TIME: 11:12:12

Input Set : A:\PTO.FG.txt

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L:9 M:270 C: Current Application Number differs, Replaced Current Application Number

L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:26 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:1

M:340 Repeated in SeqNo=1

L:104 M:254 E: No. of Bases conflict, LENGTH:Input:18 Counted:17 SEQ:4

L:157 M:254 E: No. of Bases conflict, LENGTH:Input:6 Counted:25 SEQ:8

L:157 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:2

L:157 M:252 E: No. of Seq. differs, <211> LENGTH:Input:24 Found:25 SEQ:8